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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,491	06/06/2001	Toyokazu Sugai	1163-0340P	5202

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EXAMINER

CHOWDHURY, SUMAIYA A

ART UNIT	PAPER NUMBER
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2623

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/857,491	Applicant(s) SUGAI, TOYOKAZU	
	Examiner Sumaiya A. Chowdhury	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8-10 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8-10 and 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/10/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/07 has been entered.

Response to Arguments

2. Applicant's arguments filed in the Pre-Appeal Brief Request on 9/4/07 have been fully considered but they are not persuasive.

(a) Applicant argues "...there is not teaching or suggestion in Arsenault of determining whether there is too much information in the EPG objects ..." on page 3, 3rd paragraph of the Pre-Appeal Brief Request filed 9/4/07.

After careful consideration, the Examiner has withdrawn the Arsenault reference and has cited Kaneko to teach this limitation.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 8-10, and 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaneko (6505347).

As for claim 1, Kaneko teaches a data transmission device, in which electronic program guide (EPG) data associated with and multiplexed with broadcast program data is produced and transmitted, comprising:

Producing means for producing the EPG data, the EPG data including one or more tables (fig. 7-fig. 16, col. 12, lines 33-52, col. 13, lines 4-65); and

Transmitting means for transforming the EPG data produced by the producing means into a bit stream and transmitting the bit stream (TS packetizing circuit – fig. 4, col. 12, lines 33-53, col. 13, lines 12-43); wherein

When the data transmission device determines that the amount of information in the EPG data produced by the producing means exceeds an amount necessary to repeatedly send out at least one type of table in the EPG data via the bit stream at a frequency equal to or higher than a predetermined sending-out frequency of the at least one type of table, while transmitting the bit stream at a rate equal to or lower than a predetermined bit rate, the amount of information in the EPG data is decreased so that the amount of information in the EPG data is less than or equal to the necessary amount (Kaneko teaches when the amount of data of each table is greater than a

preselected threshold value (e.g. 25 MB), sub-tables thereof are divided into sub-groups. As discussed above, Kaneko teaches transmitting the EPG data according to a bit rate equal to or lower than a prescribed upper limit (desired data rate; col. 12, lines 33-52). Kaneko additionally teaches the EPG data is sent out at a frequency equal to or higher than a specific sending-out frequency for at least one type of table. The tables are grouped together, and the table having the most packets is extracted for an object of determination of the transmission cycle (frequency). This results in an decreased number of objects used to determine the transmission cycle, thereby improving an operation speed of the control data generator and also decreases the number of times the bandwidth or transmission cycle is changed, thus decreasing an operation load of the control data outputting circuit (col. 15, lines 48-56). For example, referring to fig. 14, in the sub-table 2, two data elements 2-1 and 2-2 are transmitted from 23:00 to 23:25. Since 2-2 has is greater in amount of data, it is selected as the object of determination of the transmission cycle between 23:00 and 23:25. In other words, the transmission cycle between 23:00 and 23:25 is determined assuming that the data element 2-2 is to be transmitted from 23:00 to 23:25 (col. 15, line 64-col. 16, line 33).).

As for claim 8, Kaneko teaches wherein the multiple types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of priorities of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the

tables to be sent out at frequencies equal to or higher than specific sending-out frequencies of the types of tables (Col. 14 lines 18-67, Col. 15 lines 1-47 The version generator determines, based on priority, whether or not to produce a new version of a table. Producing a different version of a table is adjusting the amount of information in the table. This process is directly related to the determination of transmission cycles).

As for claim 9, Kaneko teaches wherein multiple types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of sending-out frequency reduction rates of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the tables to be sent out at frequencies equal to or higher than specific sending-out frequencies of the types of tables (Col. 15 lines 20-67, Col. 16 lines 1-67, Col. 17 lines 1-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

As for claim 10, Kaneko teaches wherein the types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of sending-out frequency reduction rates of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the tables to be sent out at frequencies equal to or

higher than the specific sending-out frequencies of the types of tables (Col. 15 lines 20-67, Col. 16 lines 1-67, Col. 17 lines 1-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

As for claim 14, Kaneko teaches wherein the one or more tables are again produced in cases where it is impossible to transmit the bit stream at a bit rate equal to or lower than the prescribed upper limit bit rate or it is impossible to send out the at least one type of table at a frequency equal to or higher than the specific sending-out frequency (Col. 14 lines 32-46 Tables are continuously produced as information is updated, so tables are "again produced" in all cases).

As for claims 15 and 16, Kaneko teaches wherein the amount of information to be included in the EPG data is calculated prior to the production of the at EPG data, and the EPG data is produced by the producing means by adjusting the amount of information to be included in the EPG data to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and to allow the at least one type of table to be sent out at a frequency equal to or higher than the specific sending-out frequency (Col. 17 lines 10-27 If it is calculated that a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into sub-groups is adjusting the amount of information in the type of table).

As for claim 17, Kaneko teaches wherein the amount of information to be included in the EPG data is calculated prior to the production of the EPG data, and the EPG data is produced by the producing means by adjusting the amount of information to be included in the EPG data to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and to allow the at least one type of table to be sent out at a frequency equal to or higher than the specific sending-out frequency (Col. 17 lines 10-27 If a sub-table, which is a type of table, contains too much data, it is divided into sub-groups. Dividing into subgroups is adjusting the amount of information in the type of table).

As for claims 18-20, Kaneko teaches wherein, prior to the production of at least one type of table, the amount of information for each type of table information in the EPG data for which the amount of is not predetermined is detected and added to a summed value in the calculation of the amount of information, the amount of information for each type of table information in the EPG data for which the amount is predetermined is read out from a record and is added to the summed value in the calculation of the amount of information, and the amount of information in the EPG data is calculated (Col. 17 lines 10-15. In both cases, (whether the amount of electronic program guide information is predetermined or not) the amount of information in each type of table is added to a summed value prior to the production of each type of table.

This is equivalent to knowing a cumulative amount of information in a table when the tables are produced. The amount of information in one of Kaneko's table is a cumulative amount of information).

As for claim 21, Kaneko teaches the data sending-out device wherein:

The producing means produces multiple types of tables –col. 12, lines 32-52, and

When the amount of information in the EPG data exceeds the necessary amount to achieve the predetermined bit rate and the sending out frequency, the amount of information in the EPG data is decreased according:

Relative priorities (first version number) of the types of tables (When a given switching time is reached, the data elements of each tables to which a first version number is assigned are first transmitted. Clearly, based on priority, data is transmitted in a sequenced order – col. 17, lines 27-35).

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko as applied to claim 21 above, and further in view of Ong.

As for claim 22, Kaneko fails to teach:

Wherein the amount of information in the at least one of the tables is decreased by deleting information of relative low importance.

In an analogous art, Ong teaches data which is of low priority is removed – col. 4, line 62 – col. 5, line 6.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Kaneko's invention to include the above mentioned limitation, as taught by Ong, for the well known desirable advantage of conserving memory.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC


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PRIMARY PATENT EXAMINER